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Department of Energy
Washington, DC 20585

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June 23, 2004

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The Honorable Bill Richardson
Governor, State of New Mexico
State Capitol
Room 400
Santa Fe, New Mexico 87501

Dear Governor Richardson

Enclosed is the revision to the Record of Decision (ROD) for the Department of Energy's Waste Isolation Pilot Plant Disposal Phase (WIPP ROD), 63 Fed. Reg. 3624 (Jan. 23, 1998).

DOE has decided to dispose of up to 2,500 cubic meters of transuranic (TRU) waste containing polychlorinated biphenyls (PCBs) in concentrations of 50 parts per million (ppm) or greater at the WIPP near Carlsbad, New Mexico. DOE's current inventory of TRU waste mixed with PCBs is located at six DOE sites: the Hanford Site in Washington, the Idaho National Engineering and Environmental Laboratory, the Savannah River Site in South Carolina, the Oak Ridge Reservation in Tennessee, the Rocky Flats Environmental Technology Site in Colorado, and the Knolls Atomic Power Laboratory in New York.

Regulatory approvals for disposal of TRU containing PCBs have been granted by both the Environmental Protection Agency and the State of New Mexico. With these regulatory changes, WIPP is now able to dispose of most of the Department's anticipated inventory of TRU waste with PCBs.

If you have further questions, please contact me at (202) 586-7709 or have your staff contact Mr. Rick A. Dearborn, Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

FOR

Jessie Hill Roberson
Assistant Secretary for
Environmental Management

Enclosure

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DEPARTMENT OF ENERGY

Revision to the Record of Decision for the Department of Energy's Waste Isolation Pilot Plant Disposal Phase

AGENCY: Department of Energy

ACTION: Revision to Record of Decision

SUMMARY: The Department of Energy (DOE), pursuant to its implementing regulations under the National Environmental Policy Act (NEPA), 10 CFR 1021.315, is revising its *Record of Decision for the Department of Energy's Waste Isolation Pilot Plant Disposal Phase* (WIPP ROD), 63 Fed. Reg. 3624 (Jan. 23, 1998). DOE has decided to dispose of up to 2,500 cubic meters of transuranic (TRU) waste containing polychlorinated biphenyls (PCBs) in concentrations of 50 parts per million (ppm) or greater at the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico. DOE's current inventory of TRU waste mixed with PCBs is located at six DOE sites: the Hanford Site in Washington, the Idaho National Engineering and Environmental Laboratory, the Savannah River Site in South Carolina, the Oak Ridge Reservation in Tennessee, the Rocky Flats Environmental Technology Site in Colorado, and the Knolls Atomic Power Laboratory in New York.[1]

Other sites in the DOE complex may also identify some TRU waste that contains PCBs

[1] In addition to more significant quantities of PCB-contaminated waste already at the Hanford site, DOE transferred a small amount of TRU waste with PCBs (4 cubic meters) from the Energy Technology Engineering Site in California to Hanford in December 2002 for characterization, repackaging, and storage pending shipment to WIPP. 67 Fed. Reg. 56989 (Sept. 6, 2002). At that time, DOE designated that particular waste for disposal at WIPP in accordance with the WIPP Land Withdrawal Act.

during the process of characterizing their TRU waste for disposal at WIPP. Subject to further NEPA review, as appropriate, DOE would dispose of this waste from other sites at WIPP once it meets all of the acceptance criteria for placement in the repository. This decision to dispose of TRU waste containing PCBs does not include the small amount of TRU waste with PCB liquids and PCB articles (e.g. capacitors, transformers, electric motors, pumps and pipes) of approximately 5 cubic meters. DOE will continue to work with the Environmental Protection Agency (EPA) on a disposition path for these wastes.

In the WIPP ROD, issued under the *Waste Isolation Pilot Plant Disposal Phase Supplemental Environmental Impact Statement* (WIPP SEIS-II), DOE/EIS-0026-S2, September 1997, DOE decided to dispose of up to 175,600 cubic meters of TRU waste from atomic energy defense activities at WIPP provided that the waste meets the repository's waste acceptance criteria.

DOE's WIPP ROD specifically excluded TRU waste with PCBs. After the WIPP ROD was issued in January 1998, EPA issued new regulations under the Toxic Substances Control Act (TSCA), *Disposal of Polychlorinated Biphenyls, Final Rule,* 63 Fed. Reg. 35384 (June 29, 1998), that allow the disposal of specific types of PCB wastes (such as PCB remediation waste) without treatment at a chemical waste landfill authorized in accordance with EPA regulations regarding TSCA at 40 CFR Part 761. DOE then asked EPA to authorize WIPP as a chemical waste landfill so that DOE could use the repository for disposal of its TRU waste containing PCBs. On May 15, 2003, EPA authorized WIPP

as a chemical waste landfill. DOE also applied to the State of New Mexico for a modification to WIPP's hazardous waste facility permit proposing to remove language reciting the prohibition on disposal of TRU waste with PCBs. This recital was based on the January 1998 WIPP ROD's exclusion of such TRU wastes, which in turn had been based on the fact that at that time there was no regulatory process available for WIPP to obtain an authorization from EPA to dispose of PCBs. On September 11, 2003, the State of New Mexico removed the recital by approval of a permit modification that allows disposal of TRU waste with PCBs at WIPP. With these regulatory changes, it is reasonable to believe that DOE will be able to obtain all the regulatory approvals necessary to allow it to dispose of most of the Department's anticipated inventory of TRU waste with PCBs.

Because the Department's estimates of its inventory of TRU waste with PCBs exceeds the inventory analyzed in the WIPP SEIS II and would not be thermally treated before disposal, DOE prepared a Supplement Analysis, *Supplement Analysis for Disposal of Polychlorinated Biphenyl-Commingled Transuranic Waste at the Waste Isolation Pilot Plant*,(DOE-EIS-0026-SA02) in accordance with DOE regulations for compliance with NEPA. Based on the Supplement Analysis, DOE determined that a supplement to the WIPP SEIS II is not required for the action decided in this revised ROD.

This revision to the WIPP ROD also constitutes the Department of Energy's designation of this waste for disposal at WIPP in accordance with Section 9(a)(1)(H) of the WIPP Land

Withdrawal Act. Accordingly, this waste is exempt from treatment standards and land disposal requirements promulgated pursuant to section 3004 of the Solid Waste Disposal Act (42 U.S.C. 6924).

FOR FURTHER INFORMATION CONTACT:

For further information regarding the WIPP SEIS-II, its ROD, the Supplement Analysis or for copies of these and other documents referenced herein, contact:

Harold Johnson, WIPP SEIS-II Document Manager
Mail Stop 535
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Post Office Box 3090
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Telephone (505) 234-7349, E-Mail: Harold.Johnson@wipp.ws

For further information on DOE's National Environmental Policy Act (NEPA) process, contact:

Carol M. Borgstrom, Director
Office of NEPA Policy and Compliance (EH-42)
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585
Telephone 202-586-4600, or leave a message at 1-800-472-2756

This Revised Record of Decision and the associated Supplement Analysis (SA) will also be available on DOE's NEPA Web page at: http://www.eh.doe.gov/nepa under DOE NEPA Documents. The SA is available from the contact person identified above and in the DOE public reading room at the Forrestal Building in Washington, DC.

SUPPLEMENTARY INFORMATION

I. Background

TRU waste is radioactive waste that contains radionuclides with atomic numbers greater than that of uranium (92) and half-lives longer than 20 years in concentrations greater than 100 nanocuries per gram of waste. Contact-handled (CH) TRU waste has a radiation dose rate at a package surface of 200 millirems or less per hour and can be safely handled by workers without additional shielding. Remote-handled (RH) TRU waste has a radiation dose rate at a package surface greater than 200 millirems per hour and requires special shielding to protect workers. In the WIPP ROD, issued under the WIPP SEIS-II, DOE decided to dispose of up to 175,600 cubic meters of TRU waste derived from atomic energy defense activities at WIPP, provided that the waste meets the repository's waste acceptance criteria. 63 Fed. Reg. 3628 (Jan. 23, l998). That decision specifically excluded TRU waste with PCBs. DOE also decided in that ROD that it would generally treat TRU waste destined for WIPP to meet the repository's TRU waste acceptance criteria. However, based on site-specific circumstances, DOE might treat TRU at some sites more extensively than these criteria would require.

In a companion ROD, based on the analyses in and made pursuant to the *Waste Management Programmatic EIS* (WM PEIS), DOE/EIS-0200, May 1997, DOE also announced that it would generally treat and store its TRU waste at the sites where that waste was currently located, except in the case of Sandia National Laboratory's waste, which would be transferred to the Los Alamos National Laboratory. Record of Decision for

the Department of Energy's Waste Management Program: Treatment and Storage of Transuranic Waste, 63 Fed. Reg. 3629 (Jan. 23, 1998). That decision also stated that DOE might decide in the future to ship TRU wastes at sites where it might be impractical to prepare them for disposal to other sites that had or were slated to have the necessary capability.

II. Basis for the Decision

Regulatory authorizations for TRU waste containing PCBs: Much of DOE's TRU waste contains hazardous constituents that are regulated under the Resource Conservation and Recovery Act (RCRA). At the time that DOE issued the WIPP ROD in January 1998, DOE had applied for, but had not yet received, initial certification of the WIPP repository by EPA under the WIPP Land Withdrawal Act, 63 Fed.Reg.3624 (Jan.23, l998),[2] and a hazardous waste facility permit issued by the State of New Mexico pursuant to RCRA and New Mexico's Hazardous Waste Act. Since that time, both EPA[3] and New Mexico[4] have issued these approvals. Consistent with the WIPP ROD and with these approvals, DOE has disposed of 55,768 cubic meters of contact handled (CH) TRU waste

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[2] EPA had issued a proposed certification of compliance, Criteria for the Certification and Recertification of the Waste Isolation Pilot Plant's Compliance With the Disposal Regulations: Certification Decision, 62 FR 58792 (Oct. 30, 1997), as the WIPP ROD noted, 63 FR at 3624.

[3] Criteria for the Certification and Recertification of the Waste Isolation Pilot Plant's Compliance With the Disposal Regulations: Certification Decision, 63 FR 27354 (May 18, 1998). EPA's certification specified that DOE would have to obtain EPA approval of its quality assurance programs at all sites other than Los Alamos, as well as of its waste characterization system of controls for all waste streams other than retrievably stored legacy debris.

[4] Hazardous waste permit issued to DOE October 27, l999, by New Mexico Environment Department (NMED).

as of early June 2004. EPA has also approved DOE's procedures for characterizing remote handled (RH) TRU waste[5].

Some of DOE's TRU waste contains PCBs in concentrations of 50 ppm or greater. Disposal of such waste is regulated under TSCA. At the time DOE issued the WIPP ROD, neither DOE nor any commercial facility had the capability to treat TRU waste with PCBs in a manner that would meet the treatment requirements for PCBs imposed by TSCA in order to allow it to be disposed of at WIPP, and applicable EPA regulations regarding PCB-contaminated waste contained no provision that would allow for disposal of such waste there without meeting these requirements. Accordingly, the WIPP ROD specifically excluded waste with PCBs with concentrations of 50 ppm or greater from the decision to proceed with disposal operations at WIPP.

Subsequently, EPA issued new regulations for PCB disposal under TSCA, 63 Fed. Reg. 35384 (June 29, 1998), establishing categories of PCB waste (such as PCB remediation waste) that could be disposed of without treatment in a chemical waste landfill authorized pursuant to 40 CFR Part 761. In light of EPA's new PCB regulations, DOE reconsidered its strategy for managing TRU waste containing PCBs. DOE updated its inventory of this waste, which identified a larger volume of CH- and RH-TRU waste with PCBs than was

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[5] Letter dated March 25, 2004, from Frank Marcinowski, Director, EPA Region VI Radiation Protection Division, to R. Paul Detwiler, Acting Manager, Carlsbad Field Office.

identified in the WIPP SEIS-II. DOE also classified its TRU wastes containing PCBs according to the categories established in the new PCB regulations. Most of DOE's TRU waste containing PCBs in concentrations of 50 ppm or greater is remediation waste, which does not require treatment prior to disposal in an authorized chemical waste landfill.

DOE applied to EPA for authorization of WIPP as a chemical waste landfill in order to dispose of its TRU waste containing PCBs. On December 10, 2002, EPA proposed to grant this authorization, and on May 15, 2003, EPA authorized WIPP as a chemical waste landfill. DOE also applied to the State of New Mexico for a modification to WIPP's hazardous waste facility permit to remove language reciting the prohibition on disposal of TRU waste with PCBs, which was based on the fact that at the time there was no regulatory process available for WIPP to obtain an authorization to dispose of PCBs. On September 11, 2003, the State of New Mexico granted the permit modification. With these regulatory changes, it is reasonable to believe that DOE will be able to obtain all the regulatory approvals necessary to allow it to dispose of most of the Department's anticipated inventory of TRU waste containing PCBs in concentrations of 50 ppm or greater. DOE must still obtain certain additional approvals from EPA with respect to its waste characterization programs at certain sites where the TRU waste containing PCBs is located.

Prior NEPA Analyses: In the WIPP SEIS II, DOE analyzed the potential environmental impacts of the treatment, storage, transportation, and disposal of TRU waste, including TRU waste containing PCBs in concentrations of 50 ppm or greater. The WIPP SEIS II assumed that TRU waste containing PCBs would be thermally treated to destroy the PCBs before disposal at WIPP. To determine whether a supplemental EIS would be needed for the proposed action to dispose of approximately 2,500 cubic meters of TRU waste containing PCBs at WIPP, DOE prepared the *Supplement Analysis for Disposal of Polychlorinated Biphenyl-Commingled Transuranic Waste at the Waste Isolation Pilot Plant*, June 2004, (DOE EIS-0026-SA02) in which DOE reviewed the impacts that would be expected from preparing and transporting up to 2,500 cubic meters of TRU waste containing PCBs and disposing of this waste at WIPP. Adding this volume of TRU waste to the Basic Inventory in the WIPP SEIS II will not exceed the total volume of 175,600 cubic meters analyzed in the WIPP SEIS II Proposed Action Alternative. DOE estimated the maximum impacts that could be associated with the addition of TRU waste containing PCBs (i.e., waste that would not be thermally treated to destroy the PCBs before disposal) to the hazardous organic compounds analyzed in Action Alternative 2 of the WIPP SEIS II. These impacts would be extremely small because no release of PCBs will occur under undisturbed conditions for at least 10,000 years. In no instance would the presence of PCBs increase the impacts beyond the small impacts presented in the WIPP SEIS II. Based on DOE's review of the potential impacts on land use, geology, hydrology, biological resources, air quality, socioeconomic conditions, noise, cultural resources, environmental justice, waste handling and characterization, transportation and long-term

performance of the WIPP repository, DOE concluded that disposing of up to 2,500 cubic meters of TRU waste containing PCBs at WIPP is not a substantial change to the Proposed Action analyzed in the WIPP SEIS II. Further, there are no substantial changes to the proposed action or significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. For these reasons, DOE has determined that a supplement to the WIPP SEIS II is not required under 40 CFR 1502.9 or 10 CFR 1021.314 in order for DOE to implement the proposed action.

Designation of Waste for WIPP: Section 9(a)(1)(H) of the WIPP Land Withdrawal Act exempts mixed TRU waste designated for disposal at WIPP from certain provisions of the Solid Waste Disposal Act, 42 U.S.C. § 6901 et seq.:

> With respect to transuranic mixed waste designated by the Secretary for disposal at WIPP, such waste is exempt from treatment standards promulgated pursuant to section 3004(m) of the Solid Waste Disposal Act (42 U.S.C. 6924(m))and shall not be subject to the land disposal prohibitions in section 3004(d), (e), (f) and (g) of the Solid Waste Disposal Act.

WIPP Land Withdrawal Amendment Act, Pub. L. No. 104-201, 110 Stat. 2422 (1996), § 3188(a) at Stat. 2853. DOE's prior RODs determining that various waste streams will be disposed of at WIPP, issued by officials with authority for management of nuclear waste, constitute designations of waste for WIPP under section 9(a)(1)(H) of the WIPP Land

Withdrawal Act.

In addition, the Secretary has also confirmed and ratified all prior designations. DOE's practice has been to issue these RODs with the reasonable expectation that it will be able to obtain all additional regulatory approvals it needs to carry out these decisions. DOE believes this practice is appropriate and that the fact that DOE needed certain additional regulatory approvals that it reasonably expected to obtain at the time it issued those RODs did not preclude the RODs from operating as a designation. Similarly, with respect to the PCB-contaminated transuranic waste, DOE does not believe that the fact that it still lacks certain regulatory approvals operates as an obstacle to its proceeding with today's ROD or to this ROD constituting a designation of TRU wastes for disposal at WIPP.

While DOE has now obtained the primary regulatory authorizations needed to dispose of TRU wastes containing PCBs in concentrations of 50 ppm or greater at WIPP, DOE recognizes that additional authorizations will be needed prior to shipping some wastes from particular sites to WIPP. For example, the Oak Ridge Reservation has not yet obtained approval from EPA and the New Mexico Environment Department (NMED) of its waste characterization program for certifying shipments of any types of TRU wastes to WIPP. Other sites, such as the Hanford Site in Richland, Washington, are approved to ship certain types of TRU wastes to WIPP (Hanford has shipped more than 450 cubic meters of TRU waste to WIPP), but have not yet obtained approval from EPA or NMED of all aspects of their waste characterization procedures for certifying TRU waste

containing PCBs in concentrations of 50 ppm or greater.

Nevertheless, DOE believes it is appropriate in this ROD to designate its entire inventory of remediation and bulk product transuranic wastes containing PCBs in concentrations of 50 ppm or greater for disposal at WIPP pursuant to Section 9(a)(1)(H) of the WIPP Land Withdrawal Act. The word "designation" connotes a fairly simple and unilateral executive action by the Department with no particular formalities associated with it. It certainly contains no suggestion that DOE must await the obtaining of all regulatory approvals before taking this unilateral act. Nothing in the WIPP Land Withdrawal Act suggests that the Secretary's authority to designate waste for disposal at WIPP is limited to wastes with respect to which DOE has obtained all necessary regulatory authorizations for disposing of them in this fashion. Moreover, the purpose of section 9(a)(1)(H) is to exempt wastes destined for WIPP from costly treatment and related requirements that otherwise would be applicable under the Solid Waste Disposal Act. Given that there is every reason to believe that DOE will be able to obtain the additional approvals it needs, there is no reason to require DOE to meet the Solid Waste Disposal Act's Land Disposal Restriction treatment requirements and associated storage limitations. To the contrary, allowing DOE to proceed with designating TRU mixed wastes containing PCBs in concentrations of 50 ppm or greater for disposal at WIPP prior to obtaining these authorizations is fully consistent with the purposes of section 9(a)(1)(H).

Conversely, requiring DOE to wait to designate wastes for disposal at WIPP until all

regulatory approvals needed to send the wastes to WIPP have been obtained would subject those wastes to treatment requirements that ultimately will not apply once the wastes are ready for disposal at WIPP. This would result in regulatory confusion and in wasted time and money spent to comply with requirements from which mixed TRU wastes ultimately sent to WIPP are exempt by virtue of section 9(a)(1)(H) of the WIPP Land Withdrawal Act. DOE believes the best and most rational interpretation of section 9(a)(1)(H) is that DOE may designate waste for disposal at WIPP at the time that DOE determines the waste can eventually be sent to WIPP, so long as there is a reasonable prospect that it will receive the necessary regulatory approvals for WIPP disposal.

With respect to the wastes at issue here, DOE believes that it will be able to obtain from EPA and New Mexico any additional approvals it may need to dispose of this material at WIPP, including state approval of the RH-TRU waste analysis plan. Waiting to designate these wastes for disposal at WIPP until all approvals needed to send the wastes to WIPP have been obtained would subject these wastes to treatment requirements that ultimately will not apply once the wastes are ready for disposal at WIPP.

Accordingly, DOE believes it is appropriate to designate the approximately 2,500 cubic meters of TRU waste containing PCBs in concentrations of 50 ppm or greater for disposal at WIPP, within the meaning of section 9(a)(1)(H) of the WIPP Land Withdrawal Act. This designation comprises up to 2,500 cubic meters of TRU wastes with PCBs in concentrations of 50 ppm or greater that have been identified at the Hanford Site, the

Idaho National Engineering and Environmental Laboratory, the Savannah River Site, the Oak Ridge Reservation, the Rocky Flats Environmental Technology Site, the Knolls Atomic Power Laboratory, and similar wastes that may be identified in the future at these or other sites, subject to further NEPA review, as appropriate.

III. Decision

In accordance with DOE's implementing regulations under NEPA, DOE has decided to dispose of its TRU waste containing PCBs in concentrations of 50 ppm or greater at WIPP near Carlsbad, New Mexico. DOE has identified approximately 2,500 cubic meters of TRU wastes with PCBs, located at six sites: the Hanford Site in Washington, the Idaho National Engineering and Environmental Laboratory, the Savannah River Site in South Carolina, the Oak Ridge Reservation in Tennessee, the Rocky Flats Environmental Technology Site in Colorado, and the Knolls Atomic Power Laboratory in New York. DOE will continue to work with EPA on options for the disposal of the relatively small portion of the Department's inventory of TRU wastes with PCBs (approximately 5 cubic meters of PCB liquids and PCB articles) that at present cannot be placed in a chemical waste landfill.

In the future, these or other sites in the DOE complex may identify additional TRU waste that contains PCBs during the process of characterizing their TRU waste for disposal at WIPP. Subject to further NEPA review, as appropriate, DOE would dispose of this waste at WIPP if it meets all of the acceptance criteria for placement in the

repository. DOE's decision in this ROD to dispose of this waste at WIPP constitutes the designation of that waste for purposes of section 9(a)(1)(H) of the WIPP Land Withdrawal Act.

DOE needs to safely and securely dispose of the TRU waste containing PCBs that has accumulated at its facilities and to provide for the disposal of such waste that it may generate in the future. DOE has requested and received the primary regulatory authorizations necessary to proceed with this decision. EPA has granted DOE's request for authorization to operate WIPP as a chemical waste landfill in accordance with TSCA, having confirmed that most of DOE's TRU waste with PCBs is remediation waste that can be disposed of at WIPP. Further, the State of New Mexico has approved a modification to WIPP's hazardous waste facility permit that removed language reciting the prohibition on disposal of TRU waste with PCBs. For the reasons discussed above, and in light of the finding that no further NEPA review is required, DOE can now safely isolate these wastes from the environment by disposing of them at WIPP.

Issued in Washington, DC on June 23, 2004

Jessie Hill Roberson
Assistant Secretary for Environmental Management